

REMARKS

The application has been amended and is believed to be in condition for allowance.

The Abstract has been amended as to form.

Applicant acknowledges with appreciation that the Official Action indicated that claims 3-6 were directed to allowable subject matter.

Accordingly, new claim 11 is based on the combination of original claim 1 and allowable claim 3. New claims 12-14 are based on claims 4-6. In view of the indication of allowable subject matter, allowance of claims 11-14 is solicited.

The Official Action objected to claims 7 and 10. These claims have been amended as indicated by the Official Action.

Claims 1 and 8 stand rejected as anticipated by BURNS 5,417,115.

Claims 1-2 and 8 stand rejected as being anticipated by NEWELL et al. 5,644,083.

Claims 7 and 9-10 stand rejected as obvious over NEWELL et al. in view of GUCKEL et al. 5,188,983 or HULSING, II et al. 6,161,440.

Independent claim 1 has been amended to recite that the thermal masking element only partly covers a surface of the cell facing the at least one wall of the housing. Claim 2 has been amended to further specify that the thermal masking element is spaced apart from the cell.

New independent claim 15 is based on amended claim 1 and more specifically recites the inventive structure. New dependent claim 16 is based on amended claim 2.

The claims thus amended are believed to be patentable over the prior art.

As disclosed on page 2 of the specification, the structure of the invention achieves the objective of reducing the differences of temperature between various portions of the cell when the cell is subject to radiations due to a temperature difference between the cell and the housing. This is disclosed as being obtained by protecting the portions of the cell having the smallest thermal inertia; that is, by partly covering the cell so that the temperature of the various portions of the cell changes uniformly, thus, minimizing the parasitic stresses to the cell.

This thermal protection may be obtained, for example, either by a masking element spaced from the cell (element 10 in Figure 1) or with a reflective masking layer (element 15 in Figure 2).

Neither of the references teaches or suggests the structure as now recited. Layer 68 of BURNS is a passivation layer as disclosed in column 7, lines 31-38. This is not a thermal masking layer. This layer 68 is in contact with the cell and covers the entire surface of the cell. Thus, this further recitation is not satisfied. When the radiations reach layer 68,

heat is immediately transmitted by conduction to the corresponding portion of the cell so that there is no thermal masking of the cell.

Accordingly, the newly added recitations of claim 1 as well as the thermal masking requirement are not satisfied by layer 68 of BURNS. Similarly, the features recited additionally by claim 15 are not satisfied by BURNS.

In a like manner, plates 29 of NEWELL et al. do not meet the recitations. Plates 29 have a mechanical dampening function as per column 3, lines 41-64, by acting as stops for the seismic mass. Plates 29 uniformly face the cell and cover the entire surface of the cell. Accordingly, the recitation of only covering part of the cell is not met. In addition, plates 29 are in contact with the one wall of the housing and are thus not spaced apart therefrom as recited in claim 2.

Thus, due to conduction, plates 29 will constantly remain at the same temperature as the housing and will act as a uniform source of heat. Based on this understanding, one can see that plates 29 do not satisfy the recitation of being a thermal masking element as they provide no thermal masking effect. These plates do not meet the requirement further added by independent claim 15.

Reconsideration and allowance of all the pending claims are respectfully requested.

The undersigned attorney has been authorized to conduct an interview in this case. However, it is believed that the above points clearly establish that the present claims are allowable over the prior art and therefore applicant does not want to unduly inconvenience the Examiner.

However, should there be any questions concerning the effect of the masking element covering only partly the cell, it is requested that the undersigned attorney be contacted so that this can be discussed and any necessary amendments to the claims be agreed upon.

Applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item:

- amended Abstract of the Disclosure